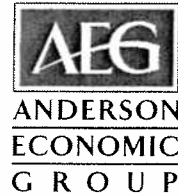


August 13, 2009



Economic Benefits of the Earned Income Tax Credit in Michigan

Commissioned by:
Michigan Association of United Ways
Community Economic Development Association of Michigan

Prepared by:
Caroline M. Sallee, Consultant

Foreword by:
Patrick L. Anderson

Anderson Economic Group, LLC
1555 Watertower Place, Suite 100
East Lansing, Michigan 48823
Tel: (517) 333-6984
Fax: (517) 333-7058
East Lansing | Chicago

www.AndersonEconomicGroup.com

<i>Foreword</i>	<i>i</i>
<i>I. Executive Summary</i>	<i>1</i>
Report Purpose	1
The Earned Income Tax Credit	1
EITC Recipients and Intensity of Usage by Michigan County	2
EITC Benefits for Michigan Households	2
Net Economic Impact Defined	3
Economic Impact of Federal EITC	3
About Anderson Economic Group	4
<i>II. Earned Income Tax Credit Usage in Michigan</i>	<i>5</i>
Federal EITC	5
Michigan EITC	5
Historical and Political Context of the EITC	5
Goals of the EITC	6
EITC as a Tax Expenditure	7
EITC Usage by Michigan County	7
<i>III. Economic Benefits of the EITC</i>	<i>11</i>
Average Benefit Amount per Household	11
Unclaimed EITC Benefits	13
Expenditures by EITC Recipients	13
Economic Benefits to the Local Community	14
Conclusion	16
<i>Appendix A: Data Tables and Economic Impact</i>	
<i>Methodology</i>	<i>A-1</i>
<i>Appendix B: About the Authors</i>	<i>B-1</i>

Foreword

I am pleased to introduce this third report on a Michigan Earned Income Tax Credit (MEITC). When we first were asked by the Michigan Catholic Conference in 1999 to examine the possible effects of a state EITC, the idea was quite controversial. The federal program was hobbled by extraordinarily complicated eligibility rules, which practically guaranteed noncompliance even by well-meaning filers. In addition, there had been no serious analysis of the broader impact of a state tax credit available to entry-level workers. Thus, policymakers were presented with a good idea for which they could fully understand the costs but not the benefits.

Much has changed since then. EITC forms were redesigned for the tax year 1999, dramatically reducing the noncompliance in the federal program. A number of other states adopted EITCs that were linked to the federal program. Our first, and later second, reports estimated both the direct costs to the taxpayer of a Michigan EITC, and the benefits to workers and the state Treasury of additional earnings and tax revenue on those earnings. These developments, and the advocacy of such long-time champions as Bob Emerson, now the State's Budget Director, allowed our policymakers to finally adopt a Michigan EITC in 2006.

This third report, authored by Caroline Sallee, contains new data and analysis on the effect of the Michigan EITC on earnings in our state. It is very timely, as the current economic and fiscal crisis forces policymakers to reduce expenditures to meet declining tax revenue. In such times, it is especially important to evaluate programs to ensure that they actually produce the goals that are intended, and to consider both the true costs and the true benefits. This report gives Michigan taxpayers and policymakers the information they need to understand how the EITC increases work effort, brings federal tax credit dollars to the state, and results in increased retail and other expenditures at private businesses throughout Michigan.

I am confident the results of this report will provide a strong basis for the state to continue policies that effectively encourage work effort and business activity in this state. The results in this report, and the last two, demonstrate that the EITC is certainly one of the most effective of these policies.

Patrick L. Anderson

Patrick L. Anderson is the founder of Anderson Economic Group, LLC, an economic consulting firm headquartered in East Lansing, Michigan. He is the author of more than 100 published works, and the executive editor of The State Economic Handbook, published annually by Palgrave MacMillan. He was the winner of the 2004 Edmund A. Mennis prize for the best writing in business economics, given by the National Association for Business Economics.

I. Executive Summary

REPORT PURPOSE

The Michigan Association of United Ways and the Community Economic Development Association of Michigan commissioned Anderson Economic Group to analyze the economic benefits to local economies of the Earned Income Tax Credit (EITC) in Michigan. This report builds upon our two previous reports and uses new data to estimate the usage of the EITC among low-income households, and the net economic impact by county due to new spending from EITC refunds.¹

THE EARNED INCOME TAX CREDIT

The Earned Income Tax Credit is a refundable tax credit on income taxes. Michigan tax filers who qualify for the federal EITC also qualify for Michigan's state Earned Income Tax Credit (MEITC). We discuss briefly both credits below.

Federal EITC. Like all tax credits, the EITC reduces the income taxes a qualifying tax payer pays compared to the taxes he or she would pay without the tax credit. Since it is a *refundable* credit, qualified taxpayers benefit even if they make so little income that they do not pay federal income taxes. In fact, most EITC recipients qualify for a tax credit that is more than they pay in taxes, and therefore receive a refund for the credit amount beyond their federal income tax liability. The EITC increases with income up to a maximum credit amount. At a certain amount of income, the credit remains flat before gradually phasing out at higher income levels.

The rationale for the enactment of the original federal EITC in 1975 was to refund payroll taxes paid by low-income workers with children. Unlike federal and state income taxes, which have exemptions and deductions, social security and unemployment payroll taxes apply to the first dollar of earnings. Federal and state earned income tax credits reduce this tax burden at very low income levels, providing a credit for the taxes paid and giving money to the worker.

The EITC reduces poverty by providing cash assistance to low- and moderate-income working families, while improving the incentive to work. Today, the EITC is widely considered the most effective program for helping families work their way out of poverty.

Michigan EITC. The Michigan Earned Income Tax Credit (MEITC) builds upon the federal EITC. The MEITC provides a refundable tax credit *in addition to* the federal tax credit. The MEITC allows taxpayers who qualify and receive the federal EITC to claim 20% of the federal credit amount on their Michigan income tax for tax years that begin after December 31, 2008.²

1. See Patrick L. Anderson, *A Hand Up for Michigan Workers: Creating a State Earned Income Tax Credit*, prepared for the Michigan Catholic Conference, Lansing, MI (2002), and Patrick L. Anderson, Caroline M. Sallee, and Alex L. Rosaen, *A Hand Up for Michigan Workers: Michigan's State Earned Income Tax Credit, An Update to AEG's 2002 Report*, prepared for the Michigan Catholic Conference, Lansing, MI (2008). Both reports are available at: <http://www.AndersonEconomicGroup.com>.

2. Public Act 372 of 2006 created the Michigan EITC.

Executive Summary

EITC RECIPIENTS AND INTENSITY OF USAGE BY MICHIGAN COUNTY

In 2006, over 677,000 Michigan households received the EITC, or approximately 18% of all households in Michigan. We estimate that 80% of households who were eligible to receive EITC benefits in 2006 claimed them in Michigan. This tells us the *participation rate* by EITC-eligible households, or the percentage of households who claim the EITC that are eligible to do so. Data that would allow us to calculate the participation rate by county does not exist.

In order to compare the usage of the EITC by residents across counties, we calculated the prevalence of EITC claims among low-income households. We call this *EITC intensity*, measured as the number of EITC recipient households with adjusted gross incomes (AGI) less than \$25,000 divided by the total number of households in the county with AGI less than \$25,000. EITC intensity measures how prevalent the EITC is among a population that has many eligible families. In 2006, about one-third of households statewide with incomes under \$25,000 received the EITC. The majority of Michigan counties had intensity rates ranging from 27% to 30%. See “EITC Usage by Michigan County” on page 7.

EITC BENEFITS FOR MICHIGAN HOUSEHOLDS

In 2006, Michigan households received almost \$1.3 billion in federal EITC benefits. The average federal EITC for a Michigan household was \$1,918 in 2006. This is a 16.4% increase above the average credit amount in 2001. Most recipients of the EITC receive a refund because their EITC benefit is greater than their tax liability. As shown in Table 1, the median household income for EITC recipients was between \$10,000 and \$15,000 in 2001 and 2006. The federal EITC in 2006 increased the income of the median recipient by 13% to 19%.

Tax year 2008 was the first year Michigan residents could claim the MEITC. We estimate that the average MEITC benefit per household in Michigan will be \$420 in 2009. Together the federal and state EITC will likely increase the annual income of the median Michigan recipient by 17% to 25% in 2009. See Table 1 below.

TABLE 1. Average Michigan Household Credit, 2001, 2006, and Estimate for 2009

Year	Average Federal EITC Per Household	Average Michigan EITC Per Household	Median AGI ^a of Households Receiving EITC	Average Increase in Annual Household Income Due to EITC
2001	\$1,647	n/a	\$10K-\$15K	11%-16%
2006	\$1,918	n/a	\$10K-\$15K	13%-19%
Est. 2009 ^b	\$2,100	\$420	\$10K-\$15K	17%-25%

Data Source: Brookings Metropolitan Policy Program EITC Interactive using data compiled by the IRS's Stakeholder Partnerships, Education, and Communication Return Information Databases
Analysis: Anderson Economic Group, LLC

- a. Adjusted gross income (AGI) is used to calculate federal income taxes. The median AGI is presented as a range since the AGI for EITC recipients in the data set we used is reported in \$5,000 increments.
- b. Includes both an estimate for the average federal EITC amount and Michigan EITC.

**NET ECONOMIC IMPACT
DEFINED**

We define “net economic impact” as the new economic activity directly or indirectly caused by federal EITC refunds. In calculating the net economic impact, we follow a careful methodology that only counts new expenditures in the state, and uses very conservative multipliers for indirectly-caused activity. We measure net economic impact as new economic output and new earnings to Michigan residents. See “Appendix A: Data Tables and Economic Impact Methodology” on page A-1.

**ECONOMIC IMPACT OF
FEDERAL EITC**

Federal EITC refunds generate economic activity in the communities in which they are spent. Most EITC benefits result in refund checks. We estimate that 89% of EITC benefits in Michigan are refunds to recipients, rather than off setting income taxes that families owe. We consider most (90%) EITC refunds as genuinely new expenditures in the state as the EITC provides money to tax payers with low savings rates who would likely have spent their tax dollars in their communities. In absence of the EITC, little of the federal tax dollars would have been spent in a way that benefits Michigan directly. As shown by a recent Tax Foundation report, Michigan residents pay more in federal taxes than they receive in federal spending.³ Thus, we consider these new expenditures a source of new economic activity for the community in which they are spent.

Households with incomes at the level of EITC recipients spend most of their income on food, housing, and transportation, according to data from the Consumer Expenditure Survey. Research on how EITC recipients spend their refund checks has found that EITC recipients typically spend their refunds paying bills, purchasing durable items such as home appliances and home electronics, and making vehicle purchases or repairs. See “Expenditures by EITC Recipients” on page 13.

In 2006, Michigan families received \$1.3 billion in federal EITC benefits. We estimate that 80% of these benefits resulted in refund checks that were spent in Michigan, or \$1 billion in new expenditures in the state. Each dollar of expenditure by an EITC recipient is earned by another individual or business and is then re-spent, generating an additional \$1.1 billion in new expenditures in the state. Much of this indirectly-generated economic activity creates new earnings for Michigan residents. We estimate state residents received an additional \$688 million in new earnings due to spending of federal EITC payments. For every dollar of EITC benefit received, \$1.67 is generated in new earnings for Michigan residents, as shown in Table 2 on page 4. Counties with the largest economic impact per resident include Wayne, Saginaw, Berrien, Muskegon, and Genesee Counties. See Figure 4, “Economic Impact of Federal EITC Per County Resident, 2006,” on page 17.

If all Michigan families eligible for the EITC had claimed the EITC in 2006, meaning a participation rate of 100%, we estimate the economic impact of expenditures from EITC refunds would have been \$365.7 million more. Increasing participation by 1% would generate an additional in \$3.3 million in new economic activity.

3. See Tax Foundation, *Federal Taxes Paid vs. Spending Received by State, 1981-2005*, October 17, 2007, available at: <http://www.taxfoundation.org/research/topic/92.html>.

TABLE 2. Economic Impact of Expenditures from EITC, State of Michigan, 2006

State of Michigan	Net Economic Impact (millions)
<i>New Earnings</i>	
Federal EITC Payments to Michigan Families	\$1,299.2
New Earnings Generated From Spending of EITC Payments	\$688.1
<i>New Economic Output</i>	
Direct Impact from New Spending of Federal EITC Payments	\$1,039.4
Indirectly-Generated Economic Output	<u>\$1,128.3</u>
Total Economic Output Impact of EITC Spending	\$2,167.7
<i>Memo:</i>	
<i>Potential Total Economic Impact of Unclaimed Benefits</i>	<i>\$365.7</i>

Data Sources: Brookings Metropolitan Policy Program EITC Interactive; U.S. Commerce Department RIMS II Multipliers

Source: Anderson Economic Group, LLC

See and “Economic Benefits to the Local Community” on page 14 and “Appendix A: Data Tables and Economic Impact Methodology” on page A-1.

**ABOUT ANDERSON
ECONOMIC GROUP**

Anderson Economic Group, LLC is a research and consulting firm with expertise in economics, public policy, financial valuation, market research, and land use economics. AEG has offices in East Lansing, Michigan and Chicago, Illinois. See “Appendix B: About the Authors” on page B-1.

II. Earned Income Tax Credit Usage in Michigan

In this section, we discuss the structure of the Earned Income Tax Credit (EITC), the historical and political context surrounding its creation and growth, and the recipients of the EITC by county in Michigan.

FEDERAL EITC

The EITC is a *refundable* tax credit on the federal personal income tax. It reduces the amount of income tax paid by a qualifying tax payer. Since it is a refundable credit, qualified taxpayers benefit even if they make so little income that they do not pay any federal income taxes. In such cases the taxpayer receives a check for any credit amount beyond their federal income tax liability. For example, if a married couple's tax liability is \$1,000, but their EITC is worth \$1,200, the couple would receive a check for \$200 from the federal government.

Tax payers qualify for the EITC by working and earning wages, but having income that is below a certain level. The credit amount varies whether the tax payer is single or married and how many children are in the family. The EITC increases with income up to a maximum credit amount, then phases out as the taxpayer earns enough income to pass the poverty threshold. During the phase-in, an earner watches his or her credit grow with each additional dollar he or she earns. For example, for each additional dollar that a family with two or more children earns up to a certain amount, the government gives them \$0.40, for a "phase-in rate" of 40%. The phase-in rate for families with one child is 34%.

MICHIGAN EITC

Public Act 372 of 2006 created the Michigan Earned Income Tax Credit (MEITC). The MEITC builds upon the federal EITC by allowing taxpayers who qualify and receive the federal EITC to claim 10% of the federal credit amount on their Michigan income tax for tax year 2008, and 20% for tax years that begin after December 31, 2008.

The MEITC is *in addition to* the federal tax credit. For tax year 2009, the maximum federal EITC credit amount is \$5,657 meaning that the maximum MEITC that can be awarded is \$1,131 (20% of \$5,657). In order for a tax payer to receive either the federal EITC or the Michigan EITC, the tax payer must file income taxes.

HISTORICAL AND POLITICAL CONTEXT OF THE EITC

The federal EITC came into existence in 1975. It started as a small program that refunded the payroll taxes of low-income workers with children. The original EITC gave households with at least one child a 10% tax credit on earnings up to \$4,000, and then reduced the credit by \$10 for each additional \$100 in earnings until the credit was completely phased out when earnings reached \$8,000.

During the 1980's the U.S Congress made small changes to who was eligible for the credit and the credit amount given. Two major expansions occurred in 1990 and 1993. Today, the EITC includes higher phase-in rates, meaning earners watch their credit increase faster with each dollar of earnings, larger maximum credit amounts,

and higher income levels to phase-out. The 1993 expansion also created a small credit for low-income earners with no children.⁴

Support for the EITC comes from both sides of the political spectrum. The program has enjoyed bipartisan support (e.g. the 1990 expansion was enacted by a Democratic congress and signed by a Republican president). Though each individual supporter has his or her own mix of reasons for supporting the EITC, there are certain aspects of the EITC that generate more support from one side of the political spectrum or the other. Liberal support tends to focus on the EITC's effectiveness as an antipoverty program, putting much-needed cash into the hands of the working poor and working parents with children. Conservative support focuses on the program's incentives for encouraging the able-bodied to work and financially supporting themselves.

GOALS OF THE EITC

Today, goals of the EITC include: (1) providing income support to working individuals and families, particularly families with children, and (2) encouraging work and self-sufficiency.

EITC Provides Income Support and Reduces Poverty. The EITC puts money in the hands of low-to-moderate income working families by reducing the income taxes these families pay and providing most families with a refund check. According to a study by the Center on Budget and Policy Priorities, the EITC lifts more than four million people out of poverty every year, half of which are children. Working families with incomes slightly below the federal poverty line receive the largest EITC benefits.⁵

EITC Removes Barriers to Work and Encourages Self Sufficiency. Part of the EITC's popularity with the public and lawmakers is that the EITC provides a financial incentive to work. Past programs that provided income support to low-income individuals, such as the federal Aid to Families with Dependent Children (AFDC), often contained disincentives for work. In order to receive AFDC and other welfare payments, the individual had to have an income that was low enough to qualify. When the AFDC recipient went to work, the earnings often meant a reduction in disposable income as benefits were reduced and work produced more expenses (such as child care).

Today, programs that assist the poor have addressed many of the disincentives to working and the costs of employment. The expansion of the EITC in the 1990's is one component of the new strategy. The EITC is a refundable tax credit that provides a significant financial incentive for low-income individuals to work. The

4. Saul D. Hoffman and Laurence S. Seidman, *Helping Working Families: The Earned Income Tax Credit*, 2003.

5. Ami Nagle and Nicholas Johnson, *A Hand Up: How State Earned Income Credits Help Working Families Escape Poverty in 2006*, Center on Budget and Policy Priorities, March 2006.

credit becomes larger for each dollar of earnings during the phase-in period and the credit phases out at much higher income levels.

EITC AS A TAX EXPENDITURE

The Michigan EITC is one of dozens of “tax expenditures” by the state government, accounting for an estimated \$133.5 million in FY 2009.⁶ Compared with total tax expenditures of \$35 billion, the EITC is a very small tax expenditure. After its enactment, the Michigan EITC has been compared to other tax expenditures by the state, particularly business tax expenditures. This comparison is not accurate, as business tax expenditures have very different purposes underlying their use, which we identify in our May 2009 report *Michigan's Business Tax Incentives*. Business tax incentive purposes include:

- Addressing cost disadvantages to improve Michigan’s competitiveness in attracting businesses;
- Revitalizing distressed economies by targeting specific geographic areas;
- Encouraging beneficial business activities such as research and charity; and
- Pursuing an industrial policy.

In contrast, the goals of the EITC are to reduce poverty and encourage work. The EITC is available for all to claim it who qualify. Business tax incentives are part of a different tradition; there is no presumption in American society that businesses need “relief from hardship” in the way that we think of the poor. While the EITC may have similar outcomes as business tax incentives, such as increasing employment, the ultimate purpose of the EITC is very different.

EITC USAGE BY MICHIGAN COUNTY

Number of Recipients and Participation Rates

In 2006, 677,512 households received the federal EITC. This is 23% more Michigan households that received the federal EITC than in 2001. Most Michigan families who are eligible for the EITC claim it when filing their tax returns. The Brookings Institution estimates that 857,590 Michigan households were eligible to receive the EITC in 2007.⁷ Using this figure, and EITC returns data for Michigan in 2006, we estimate that 80% of EITC-eligible families in Michigan received the EITC in 2006.⁸ This is the *participation rate* for the state, calculated as the number of families who claimed the EITC divided by the number of eligible families.

6. See State of Michigan Department of Treasury, *Executive Budget Appendix on Tax Credits, Deductions, and Exemptions, Fiscal Year 2009*. Note that the state EITC in tax year 2008, which was paid in FY 2009, was equal to 10% of the federal EITC claimed. The state EITC will increase to 20% of the federal tax credit for tax years beginning in 2009.

7. See Brookings Metropolitan Policy Program, *Characteristics of EITC-Eligible Taxpayers, 2007 in Michigan*.

8. Using IRS EITC claims data from 2006 and the number of eligible families in 2007, we calculate a participation rate of 79%. We adjust upwards to 80% for 2006 to account for the year difference between claims and number of eligible families.

The percentage increase in the number of EITC recipients by county was on average 21% between 2001 and 2006. Rural counties generally had a 10% to 20% increase; urban counties, more specifically counties in Southeast Michigan, had much higher increases in the number of EITC returns that ranged from 30% to 54%. See Figure 2, “Percentage Change in Number of EITC Recipients, 2001-2006,” on page 10.

Increases in participation during this time in Michigan could have been caused by a number of factors. First, state outreach efforts at increasing EITC participation could be partially responsible for the increase in usage. Second, since 2001 Michigan has been in a recession. The number of families with under-employed workers and declining real income has risen since 2001, meaning that more families qualified for the EITC in 2006 than in 2001.

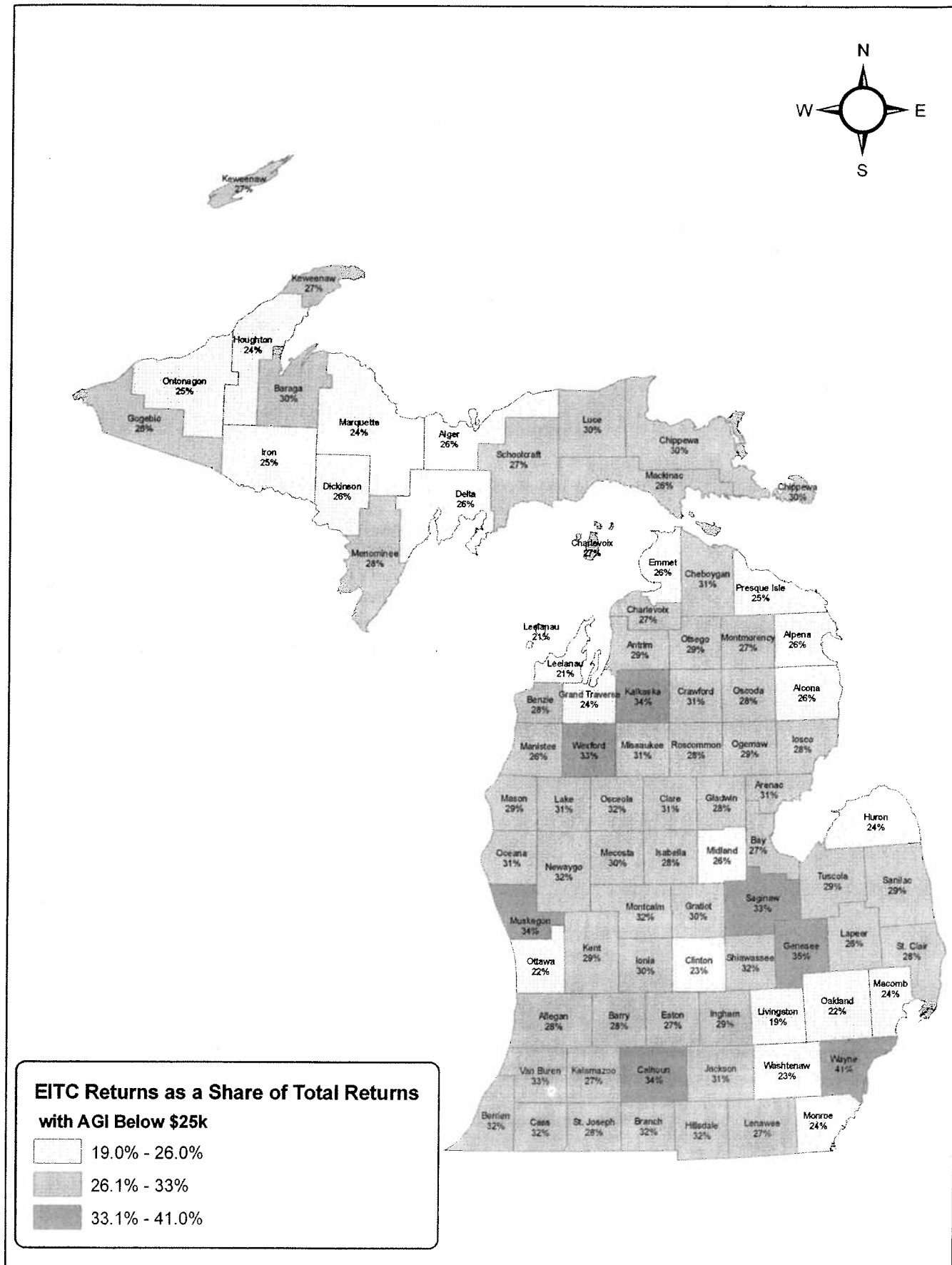
EITC Intensity by Michigan County

In addition to calculating the overall EITC participation rate for the state, we calculated the prevalence of EITC usage in each county in a population that has many eligible households. We call this “EITC intensity,” measured as the number of households with adjusted gross incomes (AGI) under \$25,000 who received the EITC, divided by the total number of households in the county with incomes under \$25,000. While income is only one factor that determines eligibility for the EITC, it is an important one. EITC intensity provides an indication of the prevalence of EITC recipients among low-income families in each county.

Using IRS tax data compiled by state and available at the county-level by the Brookings Metropolitan Policy Program, we calculated the EITC intensity rate for each Michigan county. Our analysis found that EITC intensity for the entire state increased from 27% in 2001 to 30% in 2006. While the majority of Michigan counties had EITC intensity rates ranging between 26% and 33% in 2006, twenty-two counties had intensity rates between 19% and 26%, and seven counties had rates between 33% and 41%. Counties with high EITC intensity rates include urban counties such as Genesee and Wayne, but also rural counties such as Kalkaska and Wexford. On average, the EITC intensity rate in Southeast Michigan counties in 2006 was 31%. See Figure 1, “EITC Intensity by Michigan County in 2006,” on page 9.

Higher intensity rates in certain counties could be due to several factors. First, since EITC eligibility is determined by several factors —income, number of children, and marital status—some counties may have more families that are eligible than others. A county population with a high student population would have a fewer number of EITC eligible households compare to a county that has households with similar incomes but more of the households are married or single families with children. Second, outreach efforts vary by county and could result in differences of usage. For example, some counties have many more free tax preparation sites than others that assist families with filing for the EITC.⁹

Figure 1. EITC Intensity by Michigan County, 2006



Base Data: The Brookings Institute, Earned Income Tax Credit Data.
Analysis: Anderson Economic Group, LLC 2009.

**Percent Change in EITC Returns
2001-2006**

0.0% - 10.0%
10.1% - 20.0%
20.1% - 30.0%
30.1% - 40.0%
40.1% and higher

Map Data (County and Percent Change):

County	Percent Change
Alcona	12%
Alpena	11%
Arenac	12%
Antrim	19%
Benzie	32%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	17%
Cass	16%
Calhoun	20%
Cedar	3%
Charlevoix	29%
Chippewa	13%
Cheboygan	20%
Crawford	

III. Economic Benefits of the EITC

In this section we present the average EITC benefit per household and the economic activity generated by new expenditures from EITC refunds.

AVERAGE BENEFIT AMOUNT PER HOUSEHOLD

The average Earned Income Tax Credit per Michigan household was \$1,918 in 2006. This is 16.4% more than in 2001 when the average credit was \$1,647. The credit size per household varies based on number of children and marital status. In Table 3 below, we show credit amounts by the number of children. The credit begins at \$1 and increases with each dollar of income earned to the maximum credit for each type of household size. The EITC increases by \$0.40 for married couples and \$0.34 for single earners with children during the phase-in period. The credit remains at the maximum level until income is above a certain threshold and the credit amount starts to decline. The Michigan EITC would provide an additional 20% of the federal EITC amount to Michigan families. The most a Michigan household would receive from the state in tax year 2009 is \$1,131 for a family with three children, as shown in Table 3 below.

TABLE 3. Maximum and Minimum EITC by Category, 2009

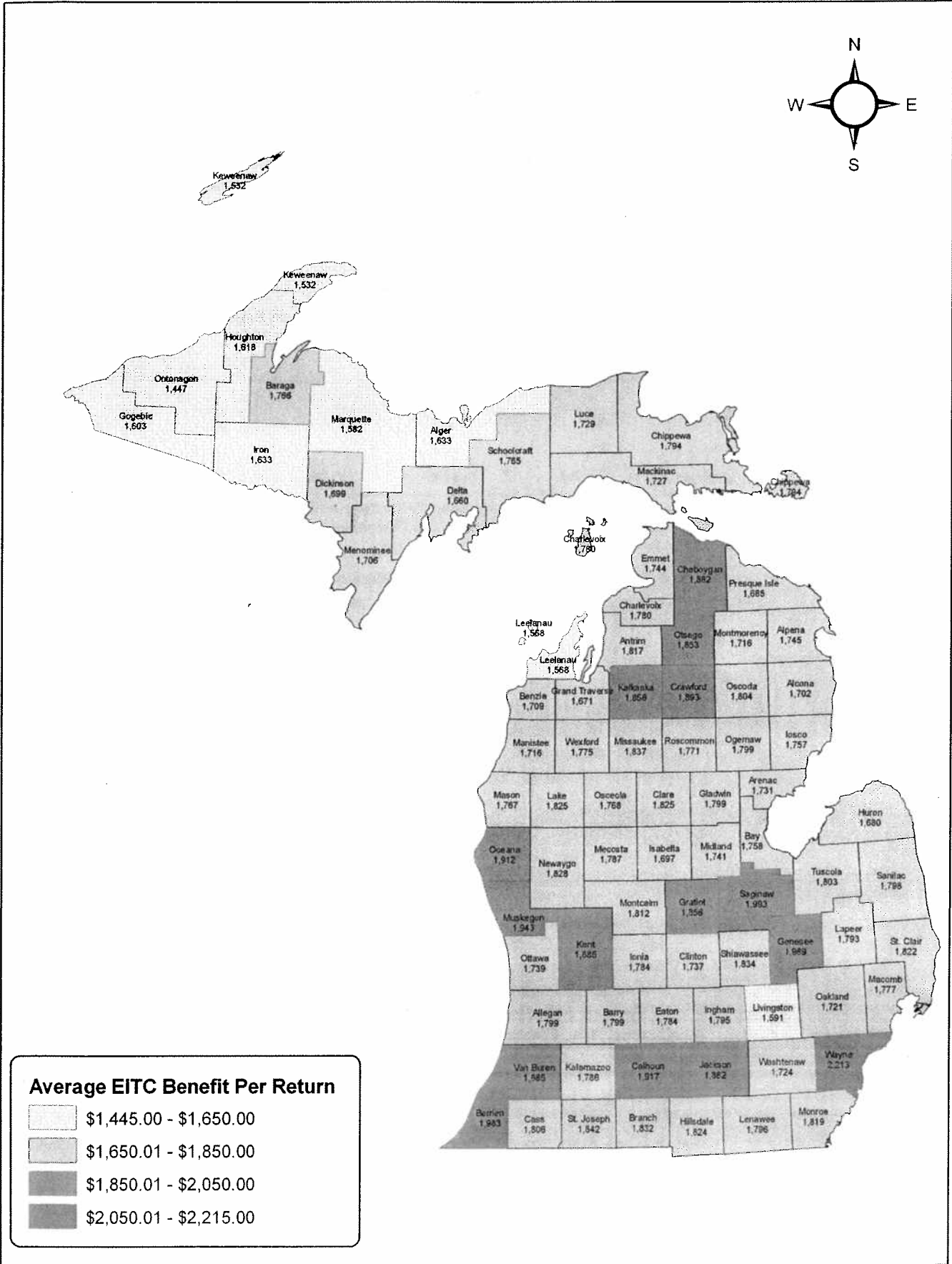
Category	Maximum Federal Credit	Maximum MEITC at 20%	Minimum Income for Max Credit	Beginning Income for Phase-out	Ending Income for Phase-out
No Children	\$457	\$91	\$5,970	\$7,470	\$13,440
One Child	\$3,043	\$609	\$8,950	\$16,420	\$35,463
Two Children	\$5,028	\$1,006	\$12,570	\$16,420	\$40,295
Three Children	\$5,657	\$1,131	\$12,570	\$16,420	\$43,279

Source: The Brookings Institution, Earned Income Tax Parameters, 1975-2009

Analysis: Anderson Economic Group, LLC

EITC Benefits by County. The average federal EITC benefit per household by Michigan county was between \$1,650 and \$1,850 in 2006. Nine counties, mostly located on the upper peninsula had lower than average benefits per return, ranging from \$1,445 to \$1,650. Fourteen counties had benefits per return between \$1,850 and \$2,050. These counties, such as Berrien, Crawford, and Saginaw Counties, were more scattered throughout the state. Wayne County had the highest average federal EITC benefit per return in Michigan in 2006 with \$2,213. See Figure 3, "Average Federal EITC Benefit Per Return, by County, 2006," on page 12.

Figure 3. Average Federal EITC Benefit (\$) Per Return, 2006



Base Data: The Brookings Institute, Earned Income Tax Credit Data.
Analysis: Anderson Economic Group, LLC 2009.

Miles 0 25 50 100

Economic Benefits of the EITC

The median adjusted gross income of households receiving the EITC was between \$10,000 and \$15,000 in 2006.⁹ The median income EITC-recipient household saw their annual income for the year increase between 13% and 19% in 2006. We estimate that in tax year 2009, the average EITC credit per household will be \$2,100 for a 17% to 25% increase in income for the median income recipient of the EITC. This incorporates a 20% Michigan EITC that adds 20% to the federal credit amount. We estimate that the average MEITC per household will be \$420 in 2009. See Table 4 below.

TABLE 4. Average Michigan Household Credit, 2001, 2006, and Estimate for 2009

Year	Average Federal EITC Per Household	Average Michigan EITC Per Household	Median AGI ^a of Households Receiving EITC	Average Increase in Annual Household Income Due to EITC
2001	\$1,647	n/a	\$10K-\$15K	11%-16%
2006	\$1,918	n/a	\$10K-\$15K	13%-19%
Est. 2009 ^b	\$2,100	\$420	\$10K-\$15K	17%-25%

Data Source: Brookings Institution Metropolitan Policy Program EITC Interactive using data compiled by the IRS's Stakeholder Partnerships, Education, and Communication Return Information Databases
Analysis: Anderson Economic Group, LLC

a. AGI is adjusted gross income used for calculating federal income taxes.

b. Includes both an estimate for the average federal EITC amount and Michigan EITC.

UNCLAIMED EITC BENEFITS

We also estimated the amount of unclaimed federal EITC benefits by county. Using Census and IRS data, the Brookings Institution estimated 857,590 Michigan households were eligible for the EITC in 2007. We took the most recent data available for number of households in Michigan that received the EITC in 2006 and calculated a participation rate of 79%. Using the state average, and estimates for how participation in each county differs from the statewide average, we estimated the amount of unclaimed benefits in 2006 to be \$221 million. See "Appendix A: Data Tables and Economic Impact Methodology" on page A-1.

EXPENDITURES BY EITC RECIPIENTS

Low-income families typically spend almost three-fourths (72%) of their income on food, housing, and transportation, according to data from the Consumer Expenditure Survey for families with incomes in the lowest 20% before taxes. The median income of EITC recipients (\$10,000 to \$15,000) falls within this category. These households spend a small amount (less than \$1,300 total) during the year on entertainment, reading materials, and personal care services. See Table A-4, "Analysis of Average Annual Expenditures for Households with Income Before Taxes in Lowest 20%, Consumer Expenditure Survey, 2007," on page A-5.

9. The IRS data reports AGI of EITC recipients in ranges of income. The median filer falls in this range.

Most EITC recipients receive tax refunds. According to the Internal Revenue Service, 90% of EITC program expenditures is due to tax refunds.¹⁰ Most recipients receive the EITC in February and March when tax refunds are normally received. While recipients could choose to receive refunds spread throughout the year, most chose not to, and instead receive one lump-sum payment.

EITC recipients primarily spend their refunds paying bills, purchasing or repairing cars, and buying durable goods such as furniture, appliances and home electronics. Research by two economists, Andrew Bacon-Goodman and Leslie McGranahan, uses the Consumer Expenditure Survey to determine whether EITC-eligible households have different expenditure patterns in February (the modal month of EITC receipt) relative to non-EITC-eligible households. They also used September as a base month to calculate differences in expenditures by these two types of households.¹¹ Compared to non-EITC eligible households they found:

- EITC eligible households spend about 18% more on durable goods in February than in September.
- EITC eligible households are 600% more likely to buy a car in February. EITC families spend 18% more on vehicle purchases in February than in September.
- EITC eligible households spend 4% more in February than in September on nondurable transportation expenses such as gasoline.
- EITC eligible households spend about 15% more on consumer electronics (televisions, video and music players) in February than in September.

Based on this research, households that receive the EITC typically use it to purchase items for their homes and to maintain or purchase vehicles. Since most low-income workers commute to work by car, the EITC is supporting expenditures that are used to encourage and increase work among this population.

ECONOMIC BENEFITS TO THE LOCAL COMMUNITY

EITC refunds generate economic activity in the communities in which they are spent. As discussed in the previous section, most spending that occurs from EITC refunds is at the retail level on durable items such as appliances, home electronics, and vehicles. Using federal EITC refunds at the county level, we estimated the new spending that occurs in Michigan using EITC refunds, and the economic output and earnings that are the result of new expenditures. The EITC increases economic activity in the local economy in two ways:

1. *Directly* as money is spent on goods and services in the county; and
2. *Indirectly* as money is re-spent in the county creating a “multiplier” effect.

10. See Andrew Goodman-Bacon and Leslie McGranahan, “How do EITC recipients spend their refunds?” Federal Reserve Bank of Chicago, *Economic Perspectives*: 2Q 2008.

11. A summary of the research on the uses of EITC can be found in Andrew Goodman-Bacon and Leslie McGranahan, “How do EITC recipients spend their refunds?” Federal Reserve Bank of Chicago, *Economic Perspectives*: 2Q 2008.

Economic Benefits of the EITC

We calculated the net economic impact of federal EITC benefits by county for 2006, the most recent year IRS data at the county level is available. See “Methodology” on page A-1 for the assumptions and methodology we used to estimate the net economic impact of federal EITC benefits.

Statewide Net Economic Impact

In 2006, Michigan families received \$1.3 billion in federal EITC benefits. We estimate that 80% of these benefits resulted in refund checks that were then spent in Michigan, or \$1 billion in new expenditures in the state. According to research explained in the previous section, most new expenditures are for items such as home electronics and appliances, or for services such as vehicle repairs. Each dollar of expenditure by an EITC recipient is earned by another individual or business and is then re-spent, generating an additional \$1.1 billion in new expenditures. Much of this indirectly-generated economic activity creates new earnings for Michigan residents. We estimate state residents received an additional \$688 million in new earnings due to spending of federal EITC payments. For every dollar of EITC benefit received, \$1.67 is generated in new earnings for Michigan residents. See Table 5 below.

If all Michigan families eligible for the EITC had claimed the EITC in 2006, meaning a participation rate of 100%, we estimate the economic impact of expenditures from EITC refunds would have been \$365 million larger. Increasing the participation rate by 1% would generate an additional \$3.3 million in new economic activity.

TABLE 5. Economic Impact of Expenditures from EITC, State of Michigan, 2006

State of Michigan	Net Economic Impact (millions)
<i>New Earnings</i>	
Federal EITC Payments to Michigan Families	\$1,299.2
New Earnings Generated From Spending of EITC Payments	\$688.1
<i>New Economic Output</i>	
Direct Impact from New Spending of Federal EITC Payments	\$1,039.4
Indirectly-Generated Economic Output	<u>\$1,128.3</u>
Total Economic Output Impact of EITC Spending	\$2,167.7
<i>Memo:</i>	
Potential Total Economic Impact of Unclaimed Benefits	\$365.7

Data Sources: Brookings Metropolitan Policy Program EITC Interactive; U.S. Commerce Department RIMS II Multipliers

Source: Anderson Economic Group, LLC

Net Economic Impact by County

Counties with large populations and many EITC recipients had the largest dollar amount of economic impact from the federal EITC. These counties include Wayne, Oakland, Macomb, Genesee, and Kent Counties. The counties with the largest eco-

economic impact *per county resident* are different from the counties with the largest dollar amounts. The five counties with the largest economic impact per resident include Wayne, Saginaw, Berrien, Muskegon, and Genesee Counties, as shown in Figure 4, "Economic Impact of Federal EITC Per County Resident, 2006," on page 17. Wayne County had the largest net economic impact per resident at \$344 per resident. Livingston County had the smallest economic impact at \$91 per resident.

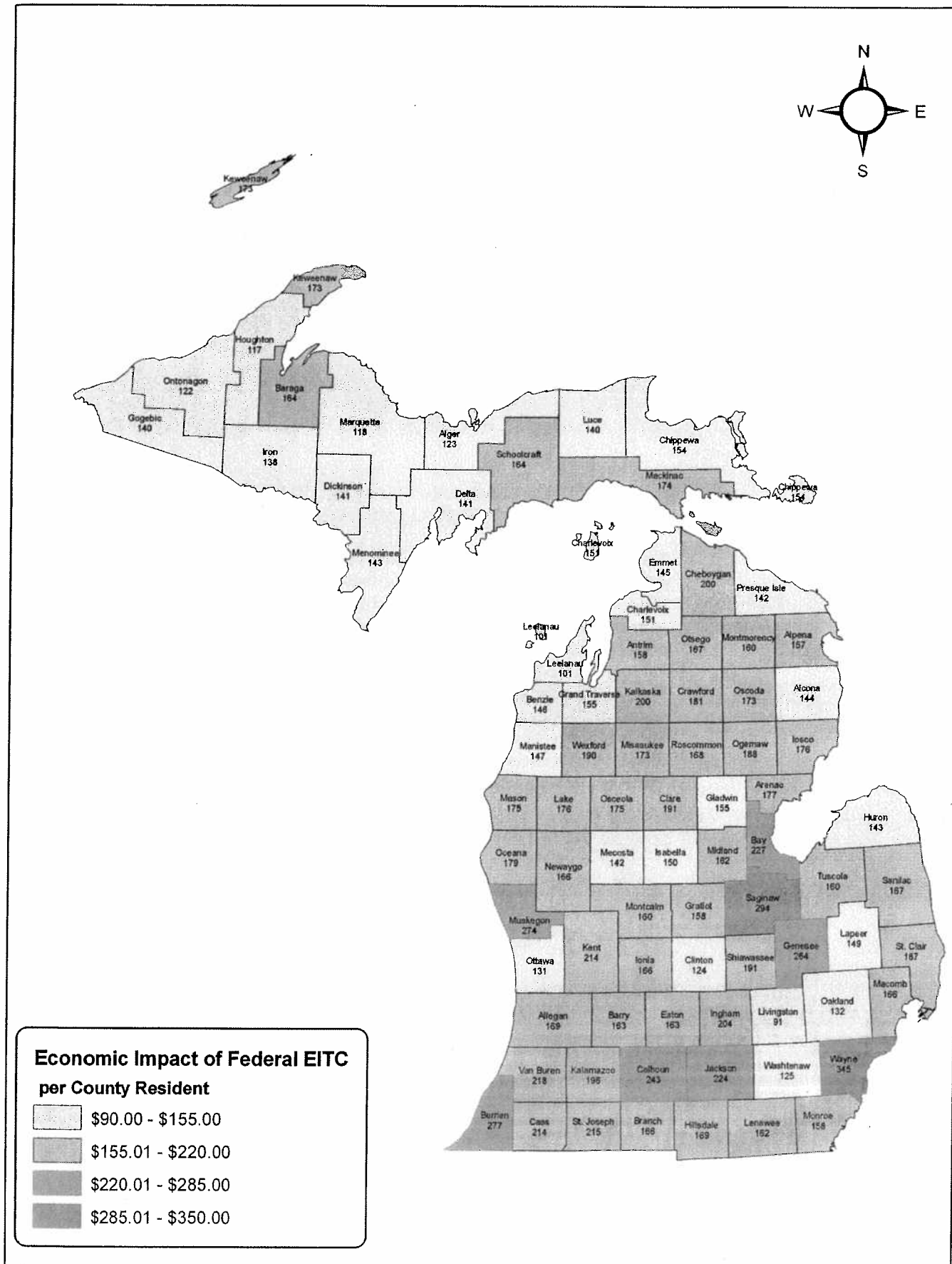
We provide county-by-county estimates of the net economic impact of the EITC in Table A-5, "Direct and Indirect Economic Impact of EITC Benefits Received and Unclaimed Benefits by Michigan County, 2006," on page A-6.

CONCLUSION

The EITC provides substantial economic benefits for Michigan residents. Most families who are eligible claim the federal EITC. Families receiving the federal EITC in 2006 saw their annual incomes increase on average by \$1,918. Recipients of the federal EITC then spent their refunds in their local communities, generating a total of \$2.2 billion in new economic activity in 2006. For every dollar of EITC benefit received in 2006, \$1.67 was generated in new economic output in Michigan.

The MEITC provides even more benefits for the families who qualify for the federal EITC. The MEITC provides a credit in addition to the federal EITC in an amount equal to 20% of the federal EITC. The MEITC reduces poverty and increases income by an average of 3% for those who receive the tax credit. The economic impact of the MEITC is different from that of the federal EITC as the money not spent on the MEITC would still have been spent in Michigan. However, it is likely that alternative uses of the MEITC funding would not be distributed so widely in the state or used as productively as putting money into the hands of families that then spend this money in their communities. The enactment of the MEITC is likely to increase awareness of the federal EITC and result in an increase in participation, which would bring more economic benefits to the state. As shown in this report, the EITC generates positive economic benefits for residents in Michigan.

Figure 4. Net Economic Impact (\$) of Federal EITC Per County Resident, 2006



Base Data: The Brookings Institute, Earned Income Tax Credit Data; AEG
 Analysis: Anderson Economic Group, LLC 2009.

Miles 0 25 50 100

Appendix A: Data Tables and Economic Impact Methodology

DATA TABLES

Included in this appendix are the following tables:

1. Appendix Table A- 2, "Number of EITC Recipients and Average Benefits per Household by Michigan County, 2006," on page 3
2. Appendix Table A- 3, "Number of EITC Recipients and Average Benefits per Household by Michigan County, 2001," on page 4
3. Appendix Table A- 4, "Analysis of Average Annual Expenditures for Households with Income Before Taxes in Lowest 20%, Consumer Expenditure Survey, 2007," on page 5
4. Appendix Table A- 5, "Direct and Indirect Economic Impact of EITC Benefits Received and Unclaimed Benefits by Michigan County, 2006," on page 6

METHODOLOGY

Unclaimed EITC Benefits

We used the following methodology to estimate the amount of unclaimed EITC benefits in each Michigan county.

1. We started with the Brookings Institution estimate of the EITC participation rate statewide for Michigan in 2007 of 79% and adjusted it to 80% to account for the difference of one year between the number filing in 2006 and the number likely eligible in 2007.
2. We calculated for each county an intensity rate by dividing the number of EITC claims by the number of filers with adjusted gross incomes below \$25,000. We also calculated a statewide intensity rate using this method.
3. We calculated the difference between each county intensity rate and the statewide intensity rate.
4. We adjusted the unclaimed percentage of credits by the difference each county was from our intensity rate. For example, if the county's intensity was 2% lower than the state average we adjusted the percentage of unclaimed credits for that county upward by 2%.
5. We then divided this unclaimed percentage for each county by the total claimed dollars of the EITC to get an unclaimed credit amount by county.
6. Finally, we lowered this unclaimed credit amount by 25% to account for those not claiming the credit already are most likely different from those who are currently claiming the EITC. Their EITC refund is most likely lower on average than those currently claiming the EITC.

Economic Impact by County

To estimate the direct and indirect economic impact of EITC benefits in each Michigan county, we followed these steps:

1. We first calculated the direct economic impact of the EITC as the amount of EITC benefits claimed in 2006 by county using IRS data as reported by Brookings Metropolitan Policy Program EITC Interactive multiplied by 80%. Subtracting 20% of the claimed EITC benefit from the direct impact accounts for non-refund benefits,

spending on goods purchased from businesses outside Michigan, and EITC benefits that are saved rather than spent immediately.

2. We classified all Michigan counties into 3 categories based on population density, which we calculated as total county population divided by county area in square miles. The three categories are low (0-99 people per square mile), medium (100-199), and high (200 and higher).
3. We selected RIMS II economic output retail multipliers for each category of population density. We selected Presque Isle County's economic output multiplier for retail for low density counties and Oakland County for high density counties. We used a multiplier that was 0.1 less than Ingham County's multiplier for the medium-density counties. Since most economic activity due to the EITC is in retail we used this economic output multiplier to estimate the indirect impact of spending due to the EITC. See Appendix Table A- 1, "Economic Impact Multipliers," on page 2.

TABLE A-1. Economic Impact Multipliers

Category	Final Demand Output Retail Multiplier
Low Population Density County	1.2301
Medium Population Density County	1.5456
High Population Density County	1.7311
State of Michigan	2.0855

Source: U.S. Department of Commerce, RIMS II Multipliers
Analysis: Anderson Economic Group, LLC

4. The state's indirect activity generated by EITC spending is larger than the sum of county estimates. This is because economic activity is not contained within the county where the recipient lives, but spills into other counties. To correct for this and apportion all indirectly-generated activity to a county, we estimated of factor of economic activity that goes beyond each county's borders. We estimated this to be 27.6%.
5. We multiplied each county's unclaimed EITC by its retail economic multiplier based on county population density by the factor to estimate the indirect impact of the EITC by county.

Appendix Table A-2. Number of EITC Recipients and Average Benefits per Household by Michigan County, 2006

County	Total Number of Federal EITC Returns Filed	Number of Returns With AGI Below \$25K	Number of Returns Receiving EITC	Est. of Number of EITC Returns With AGI Below \$25K	Total Claimed EITC Amount (\$)	EITC Intensity* (EITC Returns/Returns with AGI Below \$25K)	Average Federal EITC Benefit per Return (\$)	Average Michigan EITC Benefit (\$) at 20%**	Estimated Unclaimed Federal EITC (\$)
Alcona	5,261	2,699	803	699	1,366,680	26%	1,702	340	324,701
Alger	4,439	2,075	611	532	997,958	26%	1,633	327	240,566
Allegan	50,841	21,422	6,976	6,069	12,550,155	28%	1,799	360	2,594,785
Alpena	14,205	7,267	2,151	1,871	3,753,381	26%	1,745	349	898,218
Antrim	11,651	5,330	1,753	1,525	3,185,398	29%	1,817	363	647,650
Arenac	7,622	4,031	1,430	1,244	2,475,700	31%	1,731	346	437,744
Baraga	3,838	1,887	659	573	1,163,541	30%	1,766	353	212,170
Barry	26,843	10,788	3,522	3,064	6,336,349	28%	1,799	360	1,304,499
Bay	52,993	25,550	8,000	6,960	14,066,731	27%	1,758	352	3,098,213
Benzie	8,343	3,897	1,274	1,108	2,176,947	28%	1,709	342	447,156
Berrien	72,923	35,110	12,938	11,256	25,661,320	32%	1,983	397	4,190,922
Branch	19,356	9,194	3,410	2,967	6,247,221	32%	1,832	366	1,005,834
Calhoun	62,057	28,827	11,192	9,737	21,457,665	34%	1,917	383	3,102,774
Cass	23,479	10,620	3,948	3,435	7,130,665	32%	1,806	361	1,142,193
Charlevoix	12,947	6,064	1,881	1,636	3,348,550	27%	1,780	356	748,235
Cheboygan	12,678	6,548	2,350	2,045	4,421,632	31%	1,882	376	763,668
Chippewa	15,552	7,838	2,691	2,341	4,827,822	30%	1,794	359	909,274
Clare	13,549	7,420	2,661	2,315	4,855,531	31%	1,825	365	839,869
Clinton	32,110	12,621	3,359	2,922	5,833,627	23%	1,737	347	1,600,765
Crawford	6,349	3,309	1,173	1,021	2,220,845	31%	1,893	379	393,264
Delta	18,149	8,875	2,615	2,275	4,342,133	26%	1,660	332	1,045,766
Dickinson	13,094	6,167	1,822	1,585	3,094,733	26%	1,699	340	742,539
Eaton	51,471	20,856	6,362	5,535	11,350,190	27%	1,784	357	2,600,800
Emmet	16,703	7,720	2,277	1,981	3,970,302	26%	1,744	349	954,856
Genesee	195,284	91,764	37,443	32,575	74,489,315	35%	1,989	398	9,430,232
Gladwin	11,710	5,972	1,903	1,656	3,424,007	28%	1,799	360	733,547
Gogebic	7,302	3,919	1,176	1,023	1,884,614	26%	1,603	321	442,314
Grand Traverse	42,910	18,953	5,226	4,547	8,735,249	24%	1,671	334	2,296,142
Gratiot	17,281	8,386	2,888	2,513	5,360,738	30%	1,856	371	1,003,868
Hillsdale	20,763	9,709	3,572	3,108	6,514,599	32%	1,824	365	1,067,683
Houghton	14,704	7,630	2,088	1,817	3,378,115	24%	1,618	324	896,344
Huron	17,002	8,639	2,370	2,062	3,981,396	24%	1,680	336	1,053,179
Ingham	121,974	54,506	18,100	15,747	32,488,760	29%	1,795	359	6,497,009
Ionia	26,372	11,471	3,932	3,421	7,014,629	30%	1,784	357	1,325,080
Iosco	12,626	6,722	2,134	1,857	3,748,671	28%	1,757	351	807,915
Iron	5,818	2,968	856	745	1,397,767	25%	1,633	327	346,642
Isabella	24,938	12,198	3,889	3,383	6,601,117	28%	1,697	339	1,412,997
Jackson	69,943	31,253	11,223	9,764	21,123,374	31%	1,882	376	3,643,808
Kalamazoo	110,669	49,413	15,395	13,394	27,488,984	27%	1,786	357	6,101,205
Kalkaska	7,785	3,877	1,535	1,335	2,851,840	34%	1,858	372	392,210
Kenosha	270,534	117,473	39,485	34,352	74,410,303	29%	1,885	377	14,566,570
Keweenaw	1,366	666	207	180	317,189	27%	1,532	306	70,660
Lake	4,469	2,630	948	825	1,729,680	31%	1,825	365	296,062
Lapeer	40,926	16,684	5,033	4,379	9,022,465	26%	1,793	359	2,101,446
Leelanau	11,453	4,923	1,186	1,032	1,859,286	21%	1,568	314	569,071
Lenawee	45,286	19,229	5,957	5,183	10,701,414	27%	1,796	359	2,395,930
Livingston	83,137	28,854	6,274	5,458	9,980,390	19%	1,591	318	3,366,715
Luce	2,632	1,330	452	393	781,731	30%	1,729	346	150,019
Mackinac	5,834	3,137	950	827	1,641,069	26%	1,727	345	380,075
Macomb	407,388	163,032	45,277	39,391	80,441,407	24%	1,777	355	20,955,319
Manistee	11,708	5,826	1,764	1,535	3,026,929	26%	1,716	343	701,234
Marquette	29,613	13,959	3,863	3,361	6,110,316	24%	1,582	316	1,598,860
Mason	13,878	7,091	2,336	2,032	4,127,864	29%	1,767	353	836,928
Mecosta	16,707	8,074	2,756	2,398	4,926,089	30%	1,787	357	937,789
Menominee	11,623	5,328	1,692	1,472	2,886,866	28%	1,706	341	621,858
Midland	39,215	16,788	4,990	4,341	8,686,554	26%	1,741	348	2,066,554
Missaukee	6,326	3,217	1,164	1,013	2,137,713	31%	1,837	367	363,022
Monroe	71,937	28,166	7,763	6,754	14,119,761	24%	1,819	364	3,713,507
Montcalm	26,575	12,620	4,592	3,995	8,319,658	32%	1,812	362	1,396,212
Montmorency	4,657	2,483	781	679	1,340,224	27%	1,716	343	293,100
Muskegon	75,691	36,476	14,185	12,341	27,556,867	34%	1,943	389	3,968,388
Newaygo	20,880	9,947	3,708	3,226	6,778,736	32%	1,828	366	1,079,156
Oakland	583,068	209,752	53,716	46,733	92,459,397	22%	1,721	344	26,516,042
Oceana	11,805	5,993	2,151	1,871	4,111,883	31%	1,912	382	710,047
Ogemaw	9,823	5,354	1,807	1,572	3,249,936	29%	1,799	360	631,545
Ontonagon	3,316	1,673	490	426	709,125	25%	1,447	289	172,212
Osceola	10,142	5,065	1,890	1,644	3,341,165	32%	1,768	354	530,708
Oscoda	3,999	2,241	721	627	1,301,034	28%	1,804	361	274,425
Otsego	11,638	5,455	1,823	1,586	3,378,153	29%	1,853	371	668,090
Ottawa	115,371	45,232	11,481	9,988	19,962,243	22%	1,739	348	5,781,500
Pearce Isle	6,726	3,423	980	853	1,651,355	25%	1,685	337	413,569
Roscommon	11,610	6,290	2,031	1,767	3,596,786	28%	1,771	354	754,194
Saginaw	92,080	45,783	17,371	15,113	34,613,893	33%	1,993	399	5,291,426
Sanilac	20,217	10,137	3,309	2,879	6,028,683	28%	1,822	364	1,241,452
Schoolcraft	3,960	1,896	621	540	1,143,878	28%	1,842	368	234,216
Shiawassee	33,351	15,142	4,983	4,335	8,957,444	29%	1,798	360	1,819,404
St. Clair	77,704	33,529	10,537	9,167	18,599,099	27%	1,765	353	4,073,070
St. Joseph	27,956	12,940	4,729	4,114	8,671,548	32%	1,834	367	1,441,824
Tuscola	26,425	12,387	4,143	3,604	7,469,811	29%	1,803	361	1,475,151
Van Buren	33,884	15,848	5,940	5,168	11,194,490	33%	1,885	377	1,760,334
Washtenaw	149,252	56,085	14,562	12,669	25,101,453	23%	1,724	345	7,088,140
Wayne	801,909	375,473	176,412	153,478	390,375,007	41%	2,213	443	29,186,731
Wexford	14,974	7,522	2,864	2,492	5,083,476	33%	1,775	355	770,729
Total	4,514,579	1,968,648	677,512	589,435	1,299,220,621	30%	1,918	384	220,959,921
<i>Memo:</i>									
Average Southeast Michigan County	296,210	123,332	43,998	38,278	88,195,729	31%	1,825	365	13,041,220

Notes:

* The maximum income that qualified for the EITC in 2006 was \$36,348. Many individuals and families with adjusted gross incomes (AGI) of less than \$36,348 do not qualify for the EITC. However, to provide some indication of differences by county of EITC concentration among the population with many eligible families based on income level, we have divided the number of returns with AGI less than \$25K that received the EITC by total number of returns with AGI less than \$25K for that county. We call this measure the EITC intensity rate. 87% of EITC recipients had adjusted gross incomes of less than \$25K in 2006.

**The State of Michigan did not have a state EITC in 2006. Tax year 2009 is the first year that the state is providing a 20% credit. This provides an estimate of what the average credit would have been per household had the state offered an EITC equal to 20% of the federal EITC in 2006.

Data Source: IRS Tax Data provided by Brookings Institution Metropolitan Policy Program
Analysis: Anderson Economic Group, LLC

Appendix Table A-3. Number of EITC Recipients and Average Benefits per Household by Michigan County, 2001

County	Total Number of Federal EITC Returns Filed	Number of Returns With AGI Below \$25K	Number of Returns Receiving EITC	Est. of Number of EITC Returns With AGI Below \$25K	Total Claimed EITC Amount (\$)	EITC Intensity* (EITC Returns/Returns with AGI Below \$25K)	Average Federal EITC Benefit per Return (\$)	Average Michigan EITC Benefit (\$) at 20%**	Estimated Unclaimed Federal EITC (\$)
Alcona	5,063	2,717	715	679	1,083,053	25%	1,518	304	225,642
Alcona	4,228	2,085	537	510	859,036	24%	1,600	320	184,275
Alcona	48,295	20,365	5,473	5,199	8,567,561	26%	1,565	313	1,726,393
Alcona	13,817	7,175	1,934	1,837	2,967,727	26%	1,535	307	595,282
Alcona	11,224	5,445	1,471	1,397	2,333,624	26%	1,586	317	466,464
Alcona	7,644	4,242	1,273	1,209	2,075,853	29%	1,631	326	346,381
Alcona	3,689	1,924	573	544	876,248	28%	1,529	306	148,343
Alcona	25,683	10,412	2,608	2,478	4,008,724	24%	1,537	307	893,630
Alcona	52,204	25,540	6,491	6,166	10,288,142	24%	1,585	317	2,248,377
Alcona	7,892	3,850	966	918	1,486,689	24%	1,539	308	330,650
Alcona	71,522	35,309	11,594	11,014	20,017,926	31%	1,727	345	2,756,923
Alcona	19,247	9,645	2,755	2,617	4,259,838	27%	1,546	309	777,486
Alcona	62,113	29,577	9,359	8,891	15,337,053	30%	1,641	328	2,300,380
Alcona	22,397	10,672	3,416	3,245	5,418,885	30%	1,586	317	791,447
Alcona	12,380	5,958	1,454	1,381	2,275,697	23%	1,655	331	525,010
Alcona	12,456	6,806	1,963	1,865	3,248,929	27%	1,655	315	665,606
Alcona	15,332	8,182	2,378	2,259	3,748,284	28%	1,576	315	665,606
Alcona	13,115	7,230	2,350	2,233	3,806,116	31%	1,620	324	536,863
Alcona	30,598	12,555	2,552	2,424	4,040,331	19%	1,583	317	1,143,530
Alcona	6,109	3,284	1,006	956	1,715,678	29%	1,705	341	274,965
Alcona	17,672	9,018	2,399	2,279	3,645,780	25%	1,520	304	746,055
Alcona	12,744	6,222	1,524	1,448	2,351,629	23%	1,543	309	539,964
Alcona	49,806	20,537	4,766	4,528	7,499,194	22%	1,573	315	1,841,118
Alcona	16,019	7,614	1,686	1,602	2,541,417	21%	1,507	301	658,329
Alcona	196,816	92,345	31,395	29,825	54,231,584	32%	1,727	345	6,848,163
Alcona	11,207	5,747	1,712	1,626	2,785,173	28%	1,627	325	471,279
Alcona	7,202	4,001	1,040	988	1,555,914	25%	1,496	299	329,411
Alcona	40,027	18,666	4,001	3,801	5,943,104	20%	1,485	297	1,594,321
Alcona	16,919	8,269	2,440	2,318	3,909,293	28%	1,602	320	673,315
Alcona	20,416	9,645	2,853	2,710	4,555,511	28%	1,597	319	781,071
Alcona	14,229	7,892	1,880	1,786	2,760,217	23%	1,468	294	656,522
Alcona	16,918	8,907	2,020	1,919	3,068,331	22%	1,519	304	773,780
Alcona	122,253	55,656	14,462	13,739	22,949,764	25%	1,587	317	4,861,210
Alcona	25,858	11,285	3,039	2,887	4,787,942	26%	1,575	315	961,768
Alcona	12,195	6,807	1,879	1,785	2,994,631	26%	1,594	319	578,598
Alcona	5,696	3,226	816	775	1,189,141	24%	1,457	291	261,581
Alcona	23,831	11,908	2,955	2,807	4,545,505	24%	1,538	308	1,026,103
Alcona	69,303	31,219	9,060	8,607	14,968,473	28%	1,652	330	2,657,071
Alcona	107,910	49,449	12,586	11,957	19,721,404	24%	1,567	313	4,301,155
Alcona	7,564	3,922	1,279	1,215	2,141,275	31%	1,674	335	299,722
Alcona	261,548	114,196	30,231	28,719	49,082,770	25%	1,624	325	10,117,518
Alcona	1,254	660	177	168	242,380	25%	1,369	274	48,997
Alcona	4,052	2,461	846	804	1,363,809	33%	1,612	322	167,214
Alcona	39,930	15,799	3,601	3,421	5,666,045	22%	1,573	315	1,420,687
Alcona	10,840	4,953	957	909	1,427,131	18%	1,491	298	423,564
Alcona	44,401	19,049	4,690	4,456	7,452,943	23%	1,589	318	1,699,806
Alcona	76,455	26,154	4,086	3,882	5,815,828	15%	1,423	285	2,040,075
Alcona	2,658	1,404	422	401	682,361	29%	1,617	323	113,515
Alcona	5,903	3,336	818	777	1,274,328	23%	1,558	312	292,189
Alcona	392,874	152,728	29,775	28,286	43,732,761	19%	1,469	294	12,874,343
Alcona	11,240	5,821	1,507	1,432	2,395,766	25%	1,590	318	510,157
Alcona	28,306	13,897	3,299	3,134	4,620,185	23%	1,400	280	1,103,644
Alcona	13,427	7,147	1,974	1,875	3,144,246	26%	1,593	319	606,937
Alcona	16,164	8,112	2,419	2,298	3,950,018	28%	1,633	327	667,091
Alcona	11,267	5,562	1,559	1,481	2,293,754	27%	1,471	294	432,236
Alcona	38,701	16,766	3,963	3,765	6,078,474	22%	1,534	307	1,459,668
Alcona	6,035	3,213	969	921	1,615,844	29%	1,668	334	267,058
Alcona	68,927	27,742	6,179	5,870	9,770,014	21%	1,581	316	2,514,515
Alcona	26,259	12,373	3,816	3,625	6,105,073	29%	1,660	320	965,140
Alcona	4,593	2,521	694	659	1,072,170	26%	1,545	309	208,065
Alcona	72,899	35,503	11,863	11,270	19,988,398	32%	1,685	337	2,638,226
Alcona	19,808	9,493	3,043	2,891	5,011,593	30%	1,647	329	729,607
Alcona	583,317	208,354	39,089	37,135	56,966,242	18%	1,457	291	17,353,932
Alcona	11,303	5,927	1,837	1,745	3,082,309	29%	1,678	336	482,379
Alcona	9,330	5,223	1,542	1,465	2,550,642	28%	1,654	331	438,884
Alcona	3,333	1,785	459	436	664,880	24%	1,449	290	142,948
Alcona	10,384	5,342	1,754	1,666	2,820,802	31%	1,608	322	388,536
Alcona	3,926	2,294	673	639	1,008,391	28%	1,498	300	175,535
Alcona	11,385	5,538	1,409	1,339	2,355,854	24%	1,672	334	514,084
Alcona	107,484	42,264	8,051	7,648	12,157,990	18%	1,510	302	3,654,535
Alcona	6,733	3,526	840	798	1,278,071	23%	1,522	304	303,969
Alcona	11,388	6,376	1,831	1,739	2,986,742	27%	1,631	326	540,101
Alcona	94,125	47,227	15,290	14,526	27,251,523	31%	1,782	356	3,879,011
Alcona	19,661	10,008	2,599	2,469	4,161,058	25%	1,601	320	882,145
Alcona	3,930	2,042	605	575	944,873	28%	1,562	312	161,520
Alcona	32,775	14,896	4,048	3,846	6,154,602	26%	1,520	304	1,219,038
Alcona	76,420	33,290	8,478	8,054	13,304,040	24%	1,569	314	2,899,246
Alcona	27,432	13,324	3,964	3,766	6,311,353	28%	1,592	318	1,070,555
Alcona	26,430	12,544	3,365	3,197	5,429,526	25%	1,614	323	1,097,119
Alcona	33,105	15,939	5,121	4,865	8,564,467	31%	1,672	334	1,240,455
Alcona	144,470	54,802	10,521	9,995	15,382,122	18%	1,462	292	4,591,711
Alcona	835,126	387,264	155,584	147,805	280,872,486	38%	1,805	361	19,674,133
Alcona	13,892	7,271	2,265	2,152	3,667,700	30%	1,619	324	567,994
Total	4,463,189	1,959,434	550,873	523,329	907,284,640	27%	1,647	329	150,957,321
<i>Memo:</i>									
Average Southeast Michigan County	296,801	122,835	35,638	33,856	60,009,385	28%	1,562	312	8,599,515

Notes:

* The maximum income that qualified for the EITC in 2001 was \$32,121. Many individuals and families with adjusted gross incomes (AGI) of less than \$32,121,000 do not qualify for the EITC. However, to provide some indication of differences by county of EITC concentration among the population with many eligible families with incomes that qualify, we have divided the number of total returns with AGI less than \$25K that received the EITC by the total number of returns with AGI less than \$25K for that county. We call this measure the EITC intensity rate. 95% of EITC recipients had adjusted gross incomes of less than \$25K in 2001.

**The State of Michigan did not have a state EITC in 2001. Tax year 2009 is the first year that the state is providing a 20% credit. This provides an estimate of what the average credit would have been per household had the state offered an EITC equal to 20% of the federal EITC in 2001.

Data Source: IRS Tax Data provided by Brookings Institution Metropolitan Policy Program
Analysis: Anderson Economic Group, LLC

Appendix Table A-4. Analysis of Average Annual Expenditures for Households with Income Before Taxes in Lowest 20%, Consumer Expenditure Survey 2007

Characteristics			
Average Income Before Taxes	\$	10,531	
Average Expenditures	\$	20,471	
Category	Expenditures	Total Expenditures by Category	% of Total
<i>Food</i>			
Food at Home	\$ 2,005		
Food Away from Home	\$ 1,030		
Alcoholic Beverages	\$ 176		
Total Food		\$ 3,211	16%
<i>Housing</i>			
Shelter			
Owned Dwellings	\$ 1,716		
Rented Dwellings	\$ 3,124		
Other Lodging	\$ 107		
Utilities, fuels, and public services	\$ 2,085		
Household Operations	\$ 320		
Housekeeping Supplies	\$ 286		
Household Furnishing and equipment	\$ 646		
Total Housing		\$ 8,284	40%
<i>Apparel and services</i>		\$ 765	4%
<i>Transportation</i>			
Vehicle Purchases	\$ 1,075		
Gasoline and motor oil	\$ 1,046		
Other vehicle expenses	\$ 950		
Public transportation	\$ 171		
		\$ 3,242	16%
<i>Healthcare</i>		\$ 1,474	7%
<i>Entertainment</i>		\$ 926	5%
<i>Personal care products and services</i>		\$ 244	1%
<i>Reading</i>		\$ 54	0.3%
<i>Education</i>		\$ 614	3%
<i>Tobacco products and smoking supplies</i>		\$ 259	1%
<i>Miscellaneous</i>		\$ 305	1%
<i>Cash contributions</i>		\$ 546	3%
<i>Personal insurance and pensions</i>		\$ 547	3%
TOTAL EXPENDITURES		\$ 20,471	100%

Data Source: U.S. Bureau of Labor Statistics Consumer Expenditure Survey 2007

Analysis: Anderson Economic Group, LLC

Appendix Table A-5. Direct and Indirect Economic Output Impact of EITC Benefits Received and Unclaimed Benefits by Michigan County, 2006

County	Federal EITC Payments to Michigan Families	Economic Output Impact of EITC Benefits			Earnings Impact (2)	Unclaimed Benefits (4)
		New Spending due to EITC (Direct Impact) (1)	Indirect Impact (3)	Total Economic Output Impact		
Alcona	\$ 1,366,680	\$ 1,093,344	\$ 623,538	\$ 1,716,882	\$ 723,794	\$ 407,904
Alger	\$ 997,958	\$ 798,366	\$ 455,311	\$ 1,253,677	\$ 528,519	\$ 302,209
Allegan	\$ 12,550,155	\$ 10,040,124	\$ 9,781,174	\$ 19,821,298	\$ 6,646,562	\$ 4,098,117
Alpena	\$ 3,753,381	\$ 3,002,705	\$ 1,712,452	\$ 4,715,157	\$ 1,987,791	\$ 1,128,380
Antrim	\$ 3,185,398	\$ 2,548,318	\$ 1,453,314	\$ 4,001,632	\$ 1,686,987	\$ 813,605
Arenac	\$ 2,475,700	\$ 1,980,560	\$ 1,129,520	\$ 3,110,080	\$ 1,311,131	\$ 549,913
Baraga	\$ 1,163,541	\$ 930,833	\$ 530,857	\$ 1,461,690	\$ 616,211	\$ 266,537
Barry	\$ 6,336,349	\$ 5,069,079	\$ 4,938,340	\$ 10,007,419	\$ 3,355,730	\$ 2,060,283
Bay	\$ 14,066,731	\$ 11,253,385	\$ 13,615,048	\$ 24,868,432	\$ 7,449,741	\$ 5,477,300
Benzie	\$ 2,176,947	\$ 1,741,558	\$ 993,216	\$ 2,734,773	\$ 1,152,911	\$ 561,736
Berrien	\$ 25,661,320	\$ 20,529,056	\$ 24,837,334	\$ 45,366,390	\$ 15,590,235	\$ 7,409,089
Branch	\$ 6,247,221	\$ 4,997,777	\$ 2,850,248	\$ 7,848,025	\$ 3,308,528	\$ 1,263,572
Calhoun	\$ 21,457,665	\$ 17,166,132	\$ 16,723,391	\$ 33,889,523	\$ 11,363,979	\$ 4,900,418
Cass	\$ 7,130,665	\$ 5,704,532	\$ 5,557,403	\$ 11,261,935	\$ 3,776,400	\$ 1,803,942
Charlevoix	\$ 3,348,590	\$ 2,678,840	\$ 1,527,751	\$ 4,206,591	\$ 1,773,392	\$ 939,865
Cheboygan	\$ 4,421,632	\$ 3,537,306	\$ 2,017,337	\$ 5,554,642	\$ 2,341,696	\$ 959,353
Chippewa	\$ 4,827,822	\$ 3,862,258	\$ 2,202,658	\$ 6,064,915	\$ 2,556,815	\$ 1,142,268
Clare	\$ 4,855,531	\$ 3,884,425	\$ 2,215,300	\$ 6,099,725	\$ 2,571,489	\$ 1,055,079
Clinton	\$ 5,833,627	\$ 4,666,902	\$ 4,546,535	\$ 9,213,437	\$ 3,089,489	\$ 2,528,194
Crawford	\$ 2,220,845	\$ 1,776,676	\$ 1,013,244	\$ 2,789,920	\$ 1,176,160	\$ 494,035
Delta	\$ 4,342,133	\$ 3,473,706	\$ 1,981,066	\$ 5,454,772	\$ 2,299,594	\$ 1,313,735
Dickinson	\$ 3,094,733	\$ 2,475,786	\$ 1,411,949	\$ 3,887,735	\$ 1,638,971	\$ 932,809
Eaton	\$ 11,350,190	\$ 9,080,152	\$ 8,845,961	\$ 17,926,113	\$ 6,011,061	\$ 4,107,618
Emmet	\$ 3,970,302	\$ 3,176,242	\$ 1,811,421	\$ 4,987,662	\$ 2,102,672	\$ 1,199,531
Genesee	\$ 74,489,315	\$ 59,591,452	\$ 58,054,497	\$ 117,645,949	\$ 39,449,541	\$ 14,893,795
Gladwin	\$ 3,424,007	\$ 2,739,206	\$ 1,562,178	\$ 4,301,383	\$ 1,813,354	\$ 921,513
Goethe	\$ 1,884,614	\$ 1,507,691	\$ 859,841	\$ 2,367,532	\$ 998,092	\$ 555,654
Grand Traverse	\$ 8,735,249	\$ 6,988,199	\$ 6,807,963	\$ 13,796,162	\$ 4,626,188	\$ 3,626,451
Gratiot	\$ 5,360,738	\$ 4,288,590	\$ 2,445,797	\$ 6,734,387	\$ 2,839,047	\$ 1,261,101
Hilldale	\$ 6,514,599	\$ 5,211,679	\$ 2,972,237	\$ 8,183,916	\$ 3,450,132	\$ 1,341,269
Houghton	\$ 3,378,115	\$ 2,702,492	\$ 1,541,240	\$ 4,243,732	\$ 1,789,050	\$ 1,126,025
Huron	\$ 3,981,396	\$ 3,185,117	\$ 1,816,482	\$ 5,001,599	\$ 2,108,547	\$ 1,323,048
Ingham	\$ 32,488,760	\$ 25,991,008	\$ 31,445,545	\$ 57,436,553	\$ 17,206,047	\$ 11,485,997
Ionia	\$ 7,014,629	\$ 5,611,703	\$ 5,466,969	\$ 11,078,672	\$ 3,714,948	\$ 2,092,788
Iosco	\$ 3,748,671	\$ 2,998,937	\$ 1,710,303	\$ 4,709,240	\$ 1,985,296	\$ 1,014,937
Iron	\$ 1,397,767	\$ 1,118,214	\$ 637,721	\$ 1,755,934	\$ 740,257	\$ 435,467
Isabella	\$ 6,601,117	\$ 5,280,894	\$ 5,144,691	\$ 10,425,585	\$ 3,495,952	\$ 2,231,641
Jackson	\$ 21,123,374	\$ 16,898,699	\$ 20,445,102	\$ 37,343,801	\$ 11,186,939	\$ 6,441,852
Kalamazoo	\$ 27,488,984	\$ 21,991,187	\$ 26,696,312	\$ 48,597,499	\$ 14,558,166	\$ 10,786,260
Kalkaska	\$ 2,851,840	\$ 2,281,472	\$ 1,301,131	\$ 3,582,603	\$ 1,510,334	\$ 492,710
Kent	\$ 74,410,303	\$ 59,528,242	\$ 72,020,985	\$ 131,549,228	\$ 39,407,696	\$ 25,752,093
Keeweenaw	\$ 317,189	\$ 253,751	\$ 144,715	\$ 398,466	\$ 167,983	\$ 88,766
Lake	\$ 1,729,680	\$ 1,383,744	\$ 789,154	\$ 2,172,898	\$ 916,039	\$ 371,926
Lapeer	\$ 9,022,465	\$ 7,217,972	\$ 7,031,809	\$ 14,249,781	\$ 4,778,297	\$ 3,318,953
Leelanau	\$ 1,859,286	\$ 1,487,429	\$ 848,285	\$ 2,335,714	\$ 984,678	\$ 714,891
Lenawee	\$ 10,701,414	\$ 8,561,131	\$ 8,340,326	\$ 16,901,458	\$ 5,667,469	\$ 3,784,053
Livingston	\$ 9,980,390	\$ 7,984,312	\$ 9,659,919	\$ 17,644,231	\$ 5,285,615	\$ 5,951,981
Luce	\$ 781,731	\$ 625,385	\$ 356,659	\$ 982,044	\$ 414,005	\$ 188,460
Mackinac	\$ 1,641,069	\$ 1,312,855	\$ 748,725	\$ 2,061,581	\$ 869,110	\$ 477,467
Macomb	\$ 80,441,407	\$ 64,333,126	\$ 77,858,430	\$ 142,211,556	\$ 42,601,769	\$ 37,046,698
Manistee	\$ 3,026,929	\$ 2,421,543	\$ 1,381,014	\$ 3,802,557	\$ 1,603,062	\$ 880,920
Marquette	\$ 6,110,316	\$ 4,888,253	\$ 2,787,786	\$ 7,676,039	\$ 3,236,023	\$ 2,008,356
Mason	\$ 4,127,864	\$ 3,302,291	\$ 1,883,307	\$ 5,185,598	\$ 2,186,117	\$ 1,051,384
Mecona	\$ 4,926,089	\$ 3,940,871	\$ 2,247,491	\$ 6,188,362	\$ 2,608,857	\$ 1,178,091
Menominee	\$ 2,886,866	\$ 2,309,493	\$ 1,317,111	\$ 3,626,604	\$ 1,528,884	\$ 781,205
Midland	\$ 8,686,554	\$ 6,949,243	\$ 6,770,012	\$ 13,719,255	\$ 4,600,399	\$ 3,263,847
Missaukee	\$ 2,137,713	\$ 1,710,170	\$ 975,316	\$ 2,685,486	\$ 1,132,133	\$ 456,043
Monroe	\$ 14,119,761	\$ 11,295,809	\$ 13,666,375	\$ 24,962,184	\$ 7,477,825	\$ 6,563,071
Montcalm	\$ 8,319,658	\$ 6,655,726	\$ 3,795,782	\$ 10,451,508	\$ 4,406,091	\$ 1,753,381
Montmorency	\$ 1,340,224	\$ 1,072,179	\$ 611,467	\$ 1,683,646	\$ 709,783	\$ 368,205
Muskegon	\$ 27,556,867	\$ 22,045,494	\$ 26,672,015	\$ 48,717,508	\$ 14,594,117	\$ 7,015,673
Newaygo	\$ 6,778,736	\$ 5,422,989	\$ 3,092,748	\$ 8,515,736	\$ 3,590,019	\$ 1,355,681
Oakland	\$ 92,459,397	\$ 73,067,518	\$ 89,490,522	\$ 163,458,040	\$ 48,966,497	\$ 46,877,444
Oceana	\$ 4,111,883	\$ 3,289,506	\$ 1,876,016	\$ 5,165,522	\$ 2,177,633	\$ 891,991
Ogemaw	\$ 3,249,936	\$ 2,599,949	\$ 1,482,759	\$ 4,082,708	\$ 1,721,166	\$ 793,374
Ontonagon	\$ 709,125	\$ 567,300	\$ 323,533	\$ 890,833	\$ 375,553	\$ 216,340
Oscoda	\$ 3,341,165	\$ 2,672,932	\$ 1,524,382	\$ 4,197,314	\$ 1,769,481	\$ 666,698
Oscoda	\$ 1,301,034	\$ 1,040,827	\$ 593,587	\$ 1,634,414	\$ 689,028	\$ 344,745
Otsego	\$ 3,378,153	\$ 2,702,522	\$ 1,541,257	\$ 4,243,779	\$ 1,789,070	\$ 839,283
Ottawa	\$ 19,962,243	\$ 15,969,794	\$ 19,321,255	\$ 35,291,049	\$ 10,572,004	\$ 10,221,056
Presque Isle	\$ 1,651,355	\$ 1,321,084	\$ 753,418	\$ 2,074,502	\$ 874,558	\$ 519,543
Roscommon	\$ 3,596,786	\$ 2,877,429	\$ 1,641,007	\$ 4,518,436	\$ 1,904,858	\$ 947,450
Saginaw	\$ 34,613,893	\$ 27,691,114	\$ 33,302,439	\$ 61,193,554	\$ 18,331,518	\$ 9,354,658
Sanilac	\$ 6,028,683	\$ 4,822,946	\$ 2,750,542	\$ 7,573,488	\$ 3,192,791	\$ 1,559,565
Schoolcraft	\$ 1,143,878	\$ 915,102	\$ 521,886	\$ 1,436,988	\$ 605,798	\$ 294,232
Shiawassee	\$ 8,957,444	\$ 7,165,955	\$ 6,981,134	\$ 14,147,089	\$ 4,743,862	\$ 2,873,506
St. Clair	\$ 18,599,099	\$ 14,879,279	\$ 18,001,881	\$ 32,881,160	\$ 9,850,083	\$ 7,200,740
St. Joseph	\$ 8,671,548	\$ 6,937,238	\$ 6,758,316	\$ 13,695,555	\$ 4,592,452	\$ 2,277,170
Tuacola	\$ 7,469,811	\$ 5,975,849	\$ 3,408,045	\$ 9,383,894	\$ 3,956,012	\$ 1,853,148
Van Buren	\$ 11,194,490	\$ 8,955,592	\$ 8,724,614	\$ 17,680,206	\$ 5,928,602	\$ 2,780,212
Washtenaw	\$ 25,101,453	\$ 20,081,162	\$ 24,295,444	\$ 44,376,607	\$ 13,293,730	\$ 12,531,052
Wayne	\$ 390,375,007	\$ 312,300,066	\$ 377,840,049	\$ 690,140,055	\$ 206,742,604	\$ 51,598,929
Wexford	\$ 5,083,453	\$ 4,066,781	\$ 2,319,298	\$ 6,386,079	\$ 2,692,202	\$ 968,223
Total	\$ 1,299,220,621	\$ 1,039,376,497	\$ 1,128,243,187	\$ 2,167,619,684	\$ 688,067,241	\$ 365,729,402

Notes:

- (1) Direct impact is calculated as the EITC benefits received by households in each county as reported by the Brookings Institution Metropolitan Policy Program EITC Interactive using data compiled by the IRS's Stateholder Partnerships, Education, and Communication Return Information Databases multiplied by 90%. This accounts for benefits that are not new spending in Michigan.
- (2) Indirect impact is calculated as the direct impact of EITC benefits multiplied by the retail multiplier for type of county based on population density (low, medium, high) times a factor of 0.27, which captures the spillover of economic activity to other counties that is a result of that county's residents spending of EITC claimed benefits. See "Economic Impact by County" in Appendix A.
- (3) Earnings impact is calculated as the change in final demand for retail goods (shown as the direct economic output) multiplied by the final demand earnings multiplier for retail for the State of Michigan, or 0.662. See "Economic Impact by County" in Appendix A.
- (4) Direct and indirect economic impact of unclaimed benefits is calculated using the same methodology as for the claimed EITC benefits.

Data Sources: Brookings Metropolitan Policy Program EITC Interactive, Internal Revenue Service, U.S. Commerce RIMS II Multipliers
Analysis: Anderson Economic Group, LLC

Appendix B: About the Authors

Anderson Economic Group, LLC (AEG) is a research and consulting firm with expertise in economics, public policy, financial valuation, market research, and land use economics. AEG has offices in East Lansing, Michigan and Chicago, Illinois.

AUTHOR

Caroline M. Sallee. Ms. Sallee is a Consultant and Director of Chicago Office at Anderson Economic Group, working in the Public Policy, Fiscal, and Economic Analysis practice area. Ms. Sallee's background is in applied economics and public finance.

Ms. Sallee's recent work includes an economic impact study for Michigan's University Research Corridor, fiscal and economic impact studies for Michigan State University, and the benchmarking of Michigan's business taxes with other states in a project for the Michigan House of Representatives. She is also the co-author of a the report "A Hand Up for Michigan Workers: Michigan's State Earned Income Tax Credit" prepared for the Michigan Catholic Conference in 2008.

Prior to joining Anderson Economic Group, Ms. Sallee worked for the U.S. Government Accountability Office (GAO) as a member of the Education, Workforce and Income Security team. She also has worked as a market analyst for Hábitus, a market research firm in Quito, Ecuador and as a legislative assistant for two U.S. Representatives.

Ms. Sallee holds a Master of Public Policy degree from the Gerald R. Ford School of Public Policy at the University of Michigan and a Bachelor of Arts degree in economics and history from Augustana College.

FOREWORD

Patrick L. Anderson. Mr. Anderson founded the consulting firm of Anderson Economic Group in 1996, and serves as a principal and chief executive officer in the company. In this role he has successfully directed projects for state governments, cities, counties, nonprofit organizations, and corporations in over half of the United States.

Mr. Anderson's views are often cited in news reports throughout the United States, and his articles have been published by *The Wall Street Journal*, *The Detroit News*, *The Detroit Free Press*, *American Outlook*, *Business Economics*, and other publications. His book *Business Economics and Finance* was published in 2004, and his paper on "Pocketbook Issues and the Presidency" was awarded the Edmund Mennis Award for the best contributed paper in 2004 by the National Association for Business Economics. Mr. Anderson also contributed the chapter on business valuation and commercial damages to the book *Litigation Economics*, published in 2005, and is the executive editor of the *State Economic Handbook 2008*.

Prior to founding Anderson Economic Group, Mr. Anderson served as the Chief of Staff of the Michigan Department of State, and as Deputy Budget Director for the

State of Michigan under Governor John Engler. Prior to his involvement in State Government, Mr. Anderson served as an officer in Alexander Hamilton Life Insurance, an economist for Manufacturers National Bank of Detroit, and a graduate fellow with the Central Intelligence Agency in Washington DC.

Mr. Anderson is a graduate of the University of Michigan, where he earned a Master's degree in public policy and a Bachelor's degree in political science. He is a member of the National Association for Business Economics and the National Association of Forensic Economists. The Michigan Chamber of Commerce awarded Mr. Anderson its 2006 Leadership Michigan Distinguished Alumni award for his civic and professional accomplishments.